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10/056,489	01/24/2002	Jeffrey Herman	MAF0003.US	5646

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TAYLOR & AUST, P.C.  
142 S. Main St.  
P.O. Box 560  
Avilla, IN 46710

EXAMINER

RINEHART, KENNETH

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/056,489

Applicant(s)

HERMAN ET AL. 6

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 92-95, 97-168 and 170-239 is/are pending in the application.
- 4a) Of the above claim(s) 119-122, 157-159, 193-196 and 231-233 is/are withdrawn from consideration.
- 5) ☒ Claim(s) See Continuation Sheet is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Continuation of Disposition of Claims: Claims allowed are 104-108,117,130-137,140-147,149,150,155,156,177-183,191,204-211,214-221,223,224,229,230 and 238.

Continuation of Disposition of Claims: Claims rejected are 92-95,97-103,109-116,118,123-129,138,139,148,151-154,160-168,170-176,184-190,192,197-203,212,213,222,225-228,234-237 and 239.

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments filed 12/27/04 have been fully considered but they are not persuasive. Regarding DE'972 the applicant argues, "there is no indication of an imprinting band passing together with a plurality of membranes and the paper web through a gas pressure space." The examiner respectfully disagrees. The rollers 17 and 15 have profiled mantle surfaces with grooves which are the imprinting bands. Consequently, the reference reads on the claim limitations. Regarding claim 92 the applicant argues that the claim recites "forming the fiber web on said imprinting band" and such an invention is neither taught, disclosed nor suggested by Ampulski et al. The examiner disagrees. The cited passage and figure 5 clearly show forming the fiber web on said imprinting band. Claims in a pending application should be given their broadest reasonable interpretation. The examiner does not believe that it is unreasonable for the reference to read on the claim language. A similar argument applies to claim 165.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pre-printing the fiber web at a dry content of less than 25% with an imprinting band using a first pressure field; pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three-dimensional surface structure and its strength, said second pressure field being produced in a press nip; where at least one of said pre-imprinting step and said pressing step produce at least one of said pressure field and said second pressure field using at least one suction element, said at least one suction element located at a

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side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure; and using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web in said imprinting band guided together over said suction device and through said press nip, thereby passing air first through said imprinting band before passing through the fiber web must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 239 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 239 refers to said second pressure field being produced in a press nip; where at least one of said pre-imprinting step and said pressing step produce at least one of said pressure field and said second pressure field using at least one suction element, said at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure; and using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web in said imprinting band guided together over said suction device and through said press nip, thereby passing air first through said imprinting band before passing through the fiber web which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 163, 164 are rejected under 35 U.S.C. 102(b) as being anticipated by DE19946972. DE19946972 shows bounding a pressure space with at least four rolls (FIG. 1); pressurizing said pressure space with a compressed gas; (ABSTRACT), interposing the fiber web between a plurality of membranes (22, 10, 24); and guiding the fiber web, said plurality of membranes and an imprinting band through said pressure space at least once (FIG. 1), said plurality of membranes include an air distribution membrane and an anti rewetting membrane (22, 24, blankets, fig. 1, abstract),

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 92-95, 97-103, 109, 110, 113, 114, 115, 116, 118, 123, 124-129, 138, 139, 148, 154, 160, 161, 162, 165-168, 170-176, 184, 187-190, 192, 197-203, 212-213, 222, 228, 234-236, 237 are rejected under 35 U.S.C. 102(e) as being anticipated by Ampulski et al (6103062). Ampulski shows preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (126, fig. 1, col. 10, line 20), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering

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and drying the fiber web fixing the three dimensional surface structure and the strength (fig. 5), said method is carried out using an imprinting screen as said imprinting band (fig. 2, fig. 3), said method is carried out using an imprinting membrane as said imprinting band (fig. 2, fig. 3), forming the fiber web on said imprinting band (col. 10, lines 25-26), said preimprinting step further includes transferring the fiber web onto said imprinting band (col. 10, lines 10-12), said method is carried out using said imprinting band for said preimprinting step (col. 10, lines 25-26), and for said fixing in said pressing step (fig. 5), at least one of said pre imprinting step and said pressing step produce at least one of said first pressure field and said second pressure field using at least one suction element, said at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure (col. 10, lines 10-15), said method is carried out using at least one wet suction box as said at least one suction element (col. 10, line 17), said pressing step includes gently pressing the fiber web in said second pressure field (col. 11, lines 1-3), said pressing step includes gently pressing the fiber web over a length extending in a running direction (fig. 5), said pressing step further includes producing said second pressure field in a press nip (300, fig. 1), at least one of the steps of creping the fiber web and winding the fiber web following said pressing step (col. 17, lines 15-16), at least one of the preimprinting step and said pressing step produce said dry content less than 25 % (col. 10, line 20), said method is carried out using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web and the imprinting band guided together over said suction device and through said press nip (col. 10, lines 27-29), said method is carried out using said suction device with a curved surface and both the fiber web and said



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imprinting band are guided over said curved surface (126, fig. 1, col. 10, line 14), said method is carried out using a suction roll as said suction device (col. 10, line 14), said method is carried out using a hood providing a positive pressure and associated with a suction device to support an under pressure action of said suction device (126, fig. 1, vacuum box), said method is carried out using at least one dewatering screen with a zonally different screen permeability used in said forming region (fig. 2, fig. 3, fig. 5), said method is carried out using at least one felt with a foamed layer for dewatering the fiber web (col. 10, lines 61-67), said method is carried out using said imprinting band with at least one of a thickness between approximately 1 mm and 3 mm and an open area greater than approximately 50 %, greater than or equal to 60 %, between 70 and 75 % (fig. 2, fig. 3, col. 9, lines 22-27), an imprinting band (219, fig. 5), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (126, fig. 1, col. 10, line 20), a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (fig. 5), said imprinting band is an imprinting screen (fig. 2, fig. 3), said imprinting band is an imprinting membrane (fig. 2, fig. 3), an imprinting band where the fiber web is formed thereon (fig. 5), transferring the fiber web onto said imprinting band at said first pressure field (col. 10, lines 23-25), said imprinting band is used for a preimprinting and a fixing of the three dimensional surface structure (219, fig. 1, fig. 5), at least one of said first pressure field and said second pressure field is produced by at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure (col. 10, lines

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10-27, 126, fig. 1), said at least one suction element is a wet suction box (col. 10, line 13), the fiber web is pressed gently in said second pressure field (col. 11, lines 1-3), the fiber web is pressed gently over a length extended in said running direction (fig. 5), a press nip produced said second pressure field (300, fig. 5), at least one of said first pressure field and said second pressure field produces the fiber web with a dry content less than 25 % (col. 10, line 20), a suction device located in a position respective to said running direction between said suction element and said press nip, with said fiber web and said imprinting band guided together over said suction device and through said press nip (col. 10, lines 27-29, fig. 1), said suction device has a curved surface and both the fiber web and the imprinting band are guided over said curved surface (col. 10, line 14, fig. 1), said suction device is a suction roll (col. 10, line 14), including a hood providing a positive pressure associated with said suction device to support an under pressure action of said suction device (vacuum box, 126, fig. 1), including at least one dewatering screen with a zonally different screen permeability used in said forming region (241, fig. 2, fig. 3), said imprinting band is guided through said press nip, said imprinting band having a first area proportion of one of a plurality of raised zones and a plurality of recessed zones and a plurality of holes, said first area proportion less than said second area proportion resulting in a smaller areal proportion of the fiber web being pressed in said press nip (fig. 2, fig. 3), said imprinting band is one of an imprinting screen and an imprinting membrane (figs. 2, 3, 5), said first areal proportion is less than or equal to 40 % (col. 9, lines 22-25), said first areal proportion is between approximately 20 to 30 %, approximately 25 % (col. 9, lines 22-25), said pressing step is carried out using said plurality of raised zones and said plurality of recessed zones resulting from a plurality of offsets, each said offset resulting from an intersection in a screen fabric of a

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pick and an end (col. 9, lines 30-32) at least one felt with a foamed layer for dewatering the fiber web (col. 10, lines 61-67), a clothing (320, fig. 5) and at least one suction roll (362, fig. 5), said clothing guided together with said imprinting band (fig. 5), with the fiber web interposed therebetween, about at least one said suction roll (fig. 5), said clothing is one of a screen, a felt with a foam layer and a spectra membrane (col. 11, lines 14-16), said clothing is one of a screen, a felt with a foamed layer and a spectra membrane (col. 10, lines 61-67), a vacuum is applied to at least one suction roll (col. 12, lines 3-5), said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll (320, 240, 362, fig. 5), said clothing is one of a screen, a felt with a foam layer and a spectra membrane (col. 10, lines 61-68), applying a vacuum to said at least one suction roll (362, fig. 5), said preimprinting step occurs subsequent in a region relative to a running direction (col. 7, lines 52-57), a plurality of membranes (62, 61, fig. 1), an imprinting band (20, fig. 1), said imprinting band and said fiber web positioned between said plurality of membranes (fig. 1); and a plurality of rolls arranged in parallel bounding a pressure space pressurized by a compressed gas for driving out water from the fiber web (85a, 85d, P, fig. 1), the fiber web said imprinting band and said plurality of membranes guided together through said pressure space at least once (fig. 1).

Claims 111, 112, 165, 184, 185, 186 are rejected under 35 U.S.C. 102(b) as being anticipated by Trokhan et al. Trokhan et al shows preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (col. 6, lines 62-65, 20, 28b, 27a, fig. 1), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three dimensional surface

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structure and the strength (27b, fig. 1), forming the fiber web on said imprinting band (fig. 4) said dry content is less than 15 %, 10 % (col. 6, line 64), an imprinting band the fiber web being formed thereon (21, fig. 1), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (col. 6, lines 62-65, 20, 28b, 27a, fig. 1) a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (27b, fig. 1), at least one of said preimprinting step and said pressing step produces said dry content less than 25 % (col. 6, lines 62-65), at least one of said first pressure field and said second pressure field produces the fiber web with a dry content of less than 25 % (col. 6, lines 62-65).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 151-153, 225-227 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ampulski et al (6103062). Ampulski et al discloses preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (126, fig. 1, col. 10, line 20), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three dimensional surface structure and the strength (fig. 5), said method is carried out using a clothing guided together with said

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imprinting band, with the fiber web interposed therebetween, about at least one suction roll (320, 240, 362, fig. 5), said method is carried out with at least one said suction roll comprising a plurality of suction rolls (fig. 5), an imprinting band (219, fig. 5), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (126, fig. 1, col. 10, line 20), a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (fig. 5), forming the fiber web on said imprinting band (col. 10, lines 25-26). Ampulski et al discloses applicant's invention substantially as claimed with the exception of said method is carried out with at least one said suction roll having a diameter of between approximately 2m and 3m. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the suction roll a particular size because applicant has not disclosed that the size provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the size of Ampulski et al or the claimed size because both sizes perform the same function equally well.

### ***Allowable Subject Matter***

Claims 104-108, 117, 130-137, 140-147, 149, 150, 155, 156, 177-183, 191, 204-211, 214-221, 223-224, 229-230, 238 allowed.

### ***Conclusion***

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kbr

  
KENNETH RINEHART  
PRIMARY EXAMINER